

SUPPORTING INFORMATION

Isoprenylcysteine carboxy methyltransferase (ICMT) is associated with tumor aggressiveness and its expression is controlled by the p53 tumor suppressor

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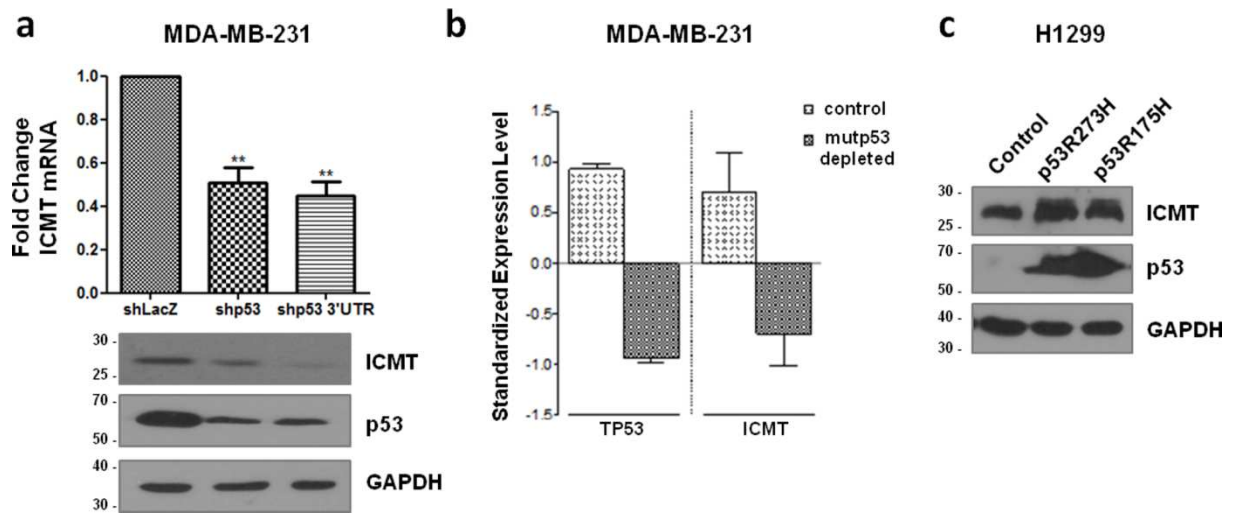
Supplementary Figures

Supplementary Figure 1

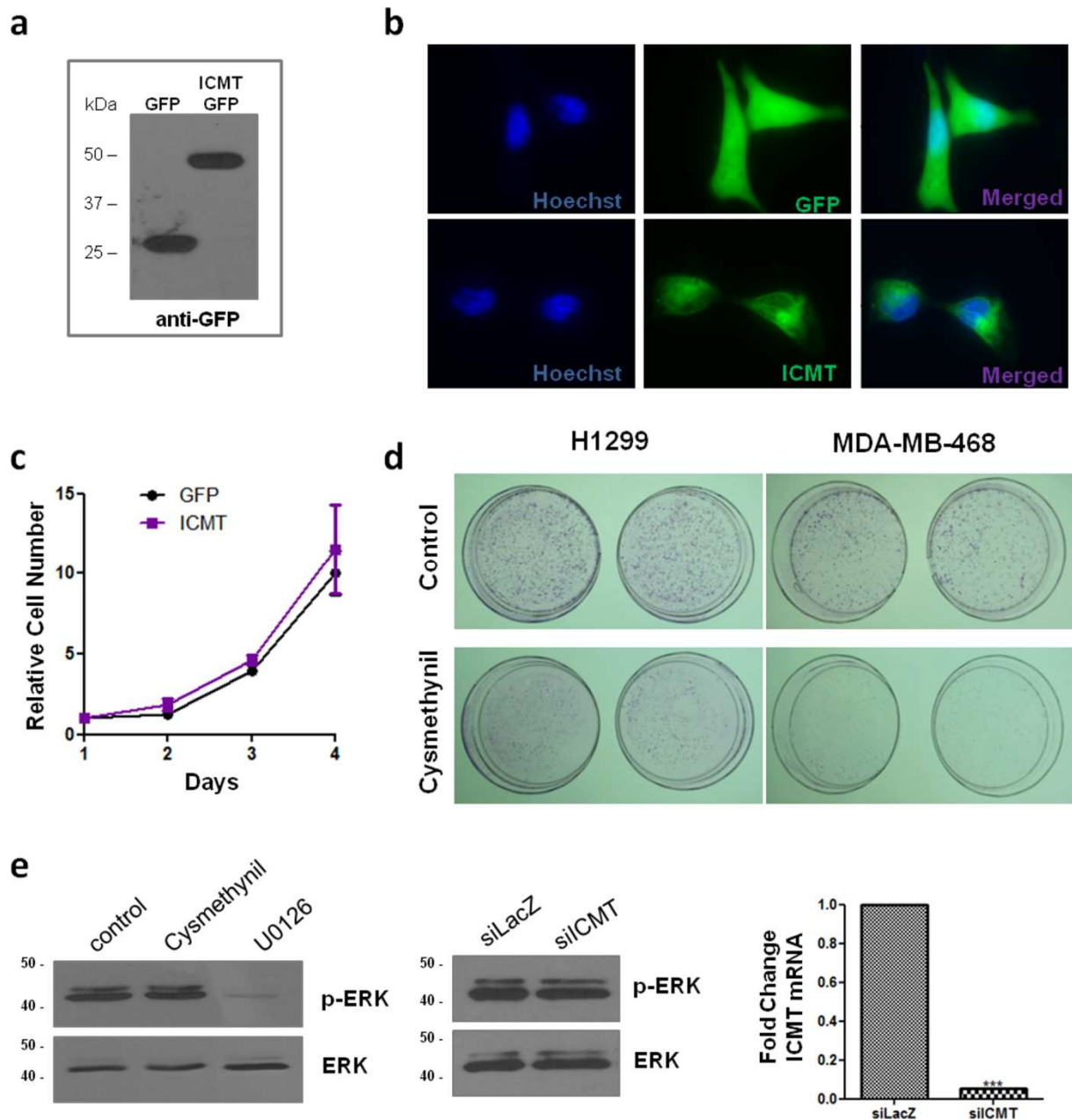
Supplementary Figure 2

Supplementary Figure 3

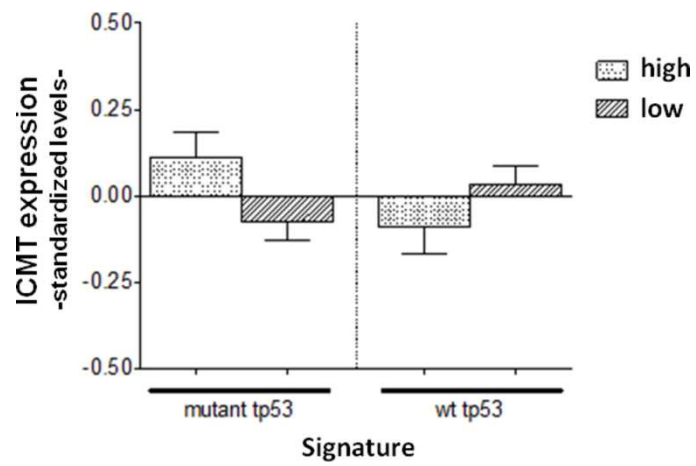
Supplementary Table 1: Oligonucleotide sequences used in PCR and RT-PCR.



Supplementary Figure 1. a) Endogenous p53R280K expression in MDA-MB-231 cells was knocked down by transduction with retroviral particles containing p53 or control shRNA (shp53, shp53 3'UTR or shLacZ) and mRNA levels were determined by qRT-PCR. ICMT mRNA levels were normalized to GAPDH mRNA and expressed as fold change comparing with controls (n=3, One way ANOVA, p = 0.0041). ICMT and p53R280K levels were determined by western blot (Lower panel). b) Standardized expression levels of *TP53* and *ICMT* (probeset 201609_x_at) in control and mutant-p53 depleted MDA-MB-231 cells (data from GEO GSE14491). c) H1299 cells were transfected with plasmids expressing p53R273H, p53R175H or empty vector (control) as indicated and western blot analysis of ICMT and p53 protein levels was performed.



Supplementary Figure 2. a) Western blot analysis on extracts of H1299 cells stably expressing GFP or ICMT-GFP, using anti-GFP antibody. Fluorescence microscopy analysis **b**) and proliferation assay **c**) on the same cell populations as in (a). **d**) Colony Formation Assay on H1299 or MDA-MB-468 cells treated with 30 μ M Cysmethynil or DMSO, representative images are shown (n=3). **e**) Western blot analysis with p-ERK antibody in H1299 cells upon treatment with 30 μ M Cysmethynil or MEK1/2 inhibitor U0126 and siRNA against ICMT (siICMT) or control (siLacZ) (n=3, One tailed T-test, *** : $p < 0.0001$).



Supplementary Figure 3. Mean standardized expression levels of ICMT in lung adenocarcinoma samples from the TCGA-LUAD dataset (n=516) stratified according to high and low mutant p53 and high and low wt p53 expression signature.

Supplementary Table 1: Oligonucleotide sequences used in PCR and RT-PCR.

Name	Sequence
ICMTqPfw	CAGTGGAGTGTACGCTTGGT
ICMTqPrv	AGAATCGCCACACTGTCAGG
GAPDHfw	TCTCTGCTCCTCCTGTTC
GAPDHrv	GCCCAATACGACCAAATCC
ICMTPrtfw-ChIP	CGAGAACTGGCAGGCGGC
ICMTPrtv-ChIP	TGTAGCCCGGAGAAACGC
ICMTPrtfw-ChIPup	CTCGCTGACCCACCACTTG
ICMTPrtv-ChIPup	AAACGCCAAGCCCTCACTC
ICMTuppLFw	AAAAAGCTTCGTTTCTCCGGGCTACAG
ICMTpLRv	AAAGGATCCCAGGTCCACCTTGACCCCTT
ICMP2fw	AAAACGCGTGCAGGGACAAGAGTGGAGAG
ICMP1rv	AAACTCGAGCTGTAGCCCGGAGAAACG
ICMPMfw	AAAACGCGTGAAAAGCTTTGCCTCC
ICMTQSaclfw	AAAGAGCTCCACGCCAGCTAATTTTTGT
ICMTP200Saclfw	AAAGAGCTCGCGACTTCTCCCACCACTT
ICMTP50Saclfw	AAAGAGCTCCATCGGCGGCACAGTGC
ICMTP200KpnIfw	AAAGGTACCGCGACTTCTCCCACCACTT
ICMTP50upSaclrv	AAAGAGCTCCCGGCCCGGGAAGGGCAG
ICMTPDfw	GCGGGCGGCATCGGCGGCACAG
ICMTPDrv	CGCCGATGCCGCCCGCGTCTG